What is claim d is:

1. A valv timing adjusting apparatus comprising:

a first rotor rotating synchronously with a crank shaft of an internal combustion engine;

a second rotor fixed to the end face of an intake or exhaust camshaft thereof and relatively rotatably provided within the first rotor by a predetermined angle;

a rotation regulating member provided within either the first rotor or the second rotor, regulating the relative rotation between the first rotor and the second rotor when the relative position between both the rotors reached a predetermined position; and

an engaging hole formed within either the first rotor or the second rotor, receiving therein the rotation regulating member during the relative rotation between both the rotors is regulated, and being closed after the regulation of the relative rotation between both the rotors is released.

2. The valve timing adjusting apparatus according to Claim 1, wherein a closing member closing the engaging hole is provided.

3. The valve timing adjusting apparatus according to Claim 2, wherein the closing member is a member sliding in an axial direction of the engaging hole.

4. Th valve timing adjusting apparatus according to Claim 2, wherein the closing memb r is a memb r sliding in a direction

crossing th axial dir ction of the ngaging hole.

5. The valve timing adjusting apparatus according to Claim 2, wherein the closing member is hydraulically slidable.

6. The valve timing adjusting apparatus according to Claim 5, wherein an oil passage supplying hydraulic pressure for the closing member is separately provided from an oil passage supplying hydraulic pressure for relatively rotating the first rotor and the second rotor.

7. The valve timing adjusting apparatus according to Claim 6, wherein the oil passage supplying hydraulic pressure for the closing member comprises a valve controlling the supply and the stop of hydraulic pressure for operating the closing member.

8. The valve timing adjusting apparatus according to Claim 5, wherein the closing member can release the regulation of the relative rotation between the first rotor and the second rotor even when the hydraulic pressure is the lowest when the internal combustion engine is running.

9. The valve timing adjusting apparatus according to Claim 1, wherein the engaging hole is formed in the position between the most advanced position and the most lagged position, which is th relative position of th s cond rotor relativ to th first rotor.

10. A valv timing adjusting apparatus comprising:

a first rotor rotating synchronously with a crank shaft of an internal combustion engine;

a second rotor fixed to the end face of an intake or exhaust camshaft thereof and relatively rotatably provided within the first rotor by a predetermined angle;

a rotation regulating member provided within either the first rotor or the second rotor, regulating the relative rotation between the first rotor and the second rotor when the relative position between both the rotors reached a predetermined position;

an engaging hole formed within either the first rotor or the second rotor, receiving therein the rotation regulating member during the relative rotation between both the rotors is regulated, and being closed after the regulation of the relative rotation between both the rotors is released; and

a closing member that forces the rotation regulating member out the engaging hole to thereby release the engagement of the rotation regulating member, and closes the engaging hole.